REMARKS

Please reconsider the present application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering the present application.

I. Disposition of Claims

Claims 1-20 are currently pending in the present application. By way of this reply, claims 1, 8, and 14 have been amended.

II. Claim Amendments

Claims 1, 8, and 14 have been amended to clarify that the drive loops force the device under test to drive packets in accordance with the "determined sequence" referred to in these claims. No new matter has been added by way of these amendments as support for these amendments may be found, for example, in lines 2 – 4 on page 6 of the present application.

III. Rejection(s) Under 35 U.S.C § 103

Claims 1-20 of the present application were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,937,182 issued to Allingam (hereinafter "Allingham") in view of U.S. Patent No. 6,324,665 issued to Fay (hereinafter "Fay"). For the reasons set forth below, this rejection is respectfully traversed.

The present invention is directed to a sequence-based verification technique for verifying the functionality of hardware components that move data between nodes in a

computer system. *See* Specification, page 5, lines 16 – 18. In one or more embodiments of the present invention, the verification technique involves the use of drive loops that force a device under test (DUT) to drive packets in accordance with a sequence determined based on timing and relation criteria of the packets. Further, prior to allowing a drive loop to force the device under test to drive a packet, the timing and relation criteria must be satisfied.

Accordingly, a sequence-based verification technique of the present invention as recited in amended independent claims 1, 8, and 14 of the present application requires, in part, that (1) timing and relation criteria be obtained/held for determining a sequence in which packets are to be driven by the device under test and (2) the timing and relation criteria be satisfied prior to allowing a drive loop to force the device under test to drive a packet.

Allingham, in contrast to the present invention, fails at least to disclose the limitations of amended independent claims 1, 8, and 14 of the present application discussed above. In fact, the final Office Action of November 12, 2003 expressly states that Allingham fails to disclose or suggest (1) obtaining/holding a set of timing and relation criteria which determines a sequence in which the packets should be driven by the device under test and (2) confirming/ensuring that the timing and relation criteria are satisfied prior to allowing the drive loop to force the device under test as required by amended independent claims 1, 8, and 14 of the present application.

Fay, like Allingham, fails to disclose all the limitations in amended independent claims 1, 8, and 14 of the present application. Fay is directed to a technique for testing a device by comparing events measured on a known good device under test with events

measured on a potentially faulty device under test. *See* Fay, Abstract. In Fay, events are observed and measured at signal nodes termed "observation nodes." *See* Fay, Abstract. Events at the observation nodes are recorded and compiled into event lists. *See* Fay, Abstract. Event lists for a potentially faulty device under test are time aligned and compared with event lists for a known good device under test to determine whether the potentially faulty device under test is actually faulty. *See* Fay, Abstract.

Figure 3 of Fay shows a device under test **20** in accordance with the teachings of Fay. Fay describes Figure 3 of Fay as showing a device under test **20** to which an input test signal **25** is applied. *See* Fay, column 7, lines 59 – 60. The input test signal **25** may consist of a synchronization pattern that can be used to time align events at observation nodes dependent on the input test signal **25** with corresponding events observed in a similar, but possibly faulty, device under test. *See* Fay, column 7, line 64 – column 8, line 20. In other words, when comparing measured events at corresponding observation nodes of a known good device under test and a potentially faulty device under test, a synchronization pattern of an input test signal applied to one device under test is matched with the synchronization pattern of the same input test signal applied to the other device under test. *See* Fay, column 7, line 64 – column 8, line 20.

By using the synchronization pattern of the input test signal to align the measured events in the known good device under test with the events in the potentially faulty device under test, an accurate comparison of behaviors of the two devices under test in response to the same input test signal can be achieved. *See* Fay, column 7, line 64 – column 8, line 20. In fact, Fay clearly states "measurement sets across different DUT's can be time aligned with one another by injecting the same synchronization pattern at the

same predetermined node on different DUT's." *See* Fay, column 8, lines 21 – 25.

Thus, the portions of Fay discussed above, which were cited in the final Office Action of November 12, 2003 as disclosing those limitations of the claimed invention not disclosed in Allingham, actually disclose a technique for time aligning events on different devices under test to determine whether a potentially faulty device under test is actually faulty. These relied upon portions do not disclose or teach either (1) obtaining/holding a set of timing and relation criteria which determines a sequence in which the packets should be driven by the device under test or (2) confirming/ensuring that the timing and relation criteria are satisfied prior to allowing the drive loop to force the device under test as required by amended independent claims 1, 8, and 14 of the present application.

The relied upon portions of Fay, in addition to the remaining portions of Fay, are altogether silent as to determining a sequence in which packets are to be driven by a device under test dependent on timing and relation criteria of the packets as required by amended independent claims 1, 8, and 14 of the present application. The synchronization pattern used to time align measured events between devices under test in Fay is distinct from a sequence in which packets are to be driven by a device under test, where the sequence is determined based on timing and relation criteria of the packets. Therefore, Fay fails to disclose those limitations of amended independent claims 1, 8, and 14 of the present application not disclosed or taught in Allingham.

In view of the above, Allingham and Fay, whether considered separately or in combination, fail to show or suggest the present invention as recited in amended independent claims 1, 8, and 14 of the present application. Thus, amended independent claims 1, 8, and 14 of the present application are patentable over Allingham and Fay.

Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

IV. Conclusion

The above amendments and remarks are believed to require no further prior art search. Also, Applicant believes this reply to be responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not hesitate to contact the undersigned or his associates at the telephone number listed below. Because the amendments and remarks simplify the issues for allowance or appeal, and do not constitute new matter, entry and consideration thereof is respectfully requested. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 06145.012001;P4860).

Respectfully submitted,

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